COLOR-DISPLAY

MODEL COLOR 300

OPERATING GUIDE

AMDEK CORP.

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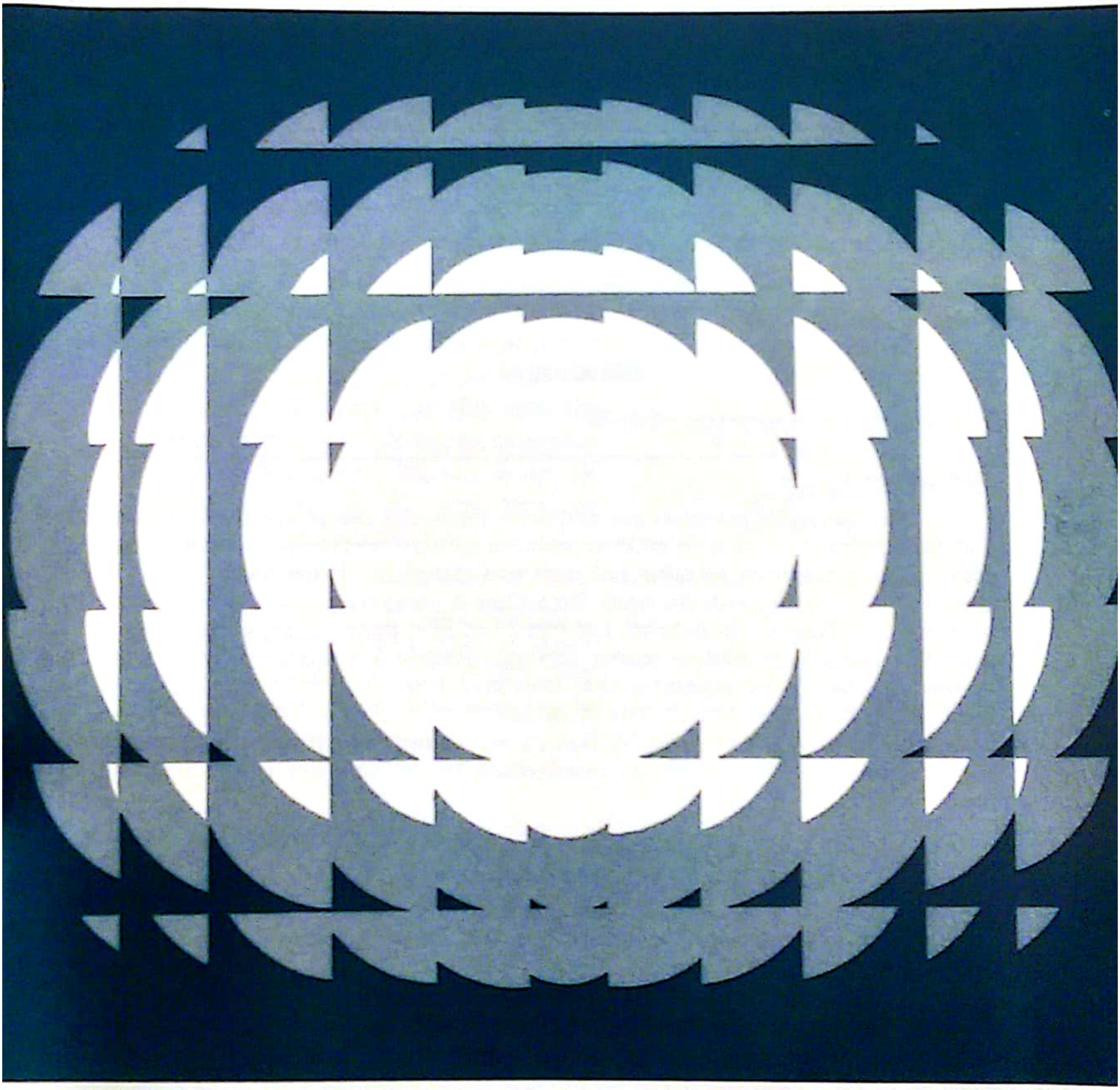


AMDEK CORP.

HOW TO GET THE MOST ENJOYMENT FROM YOUR NEW AMDEK COLOR DISPLAY

Your new AMDEK Color Display incorporates a host of features designed to give you excellent performance if you follow the instructions in this guide.

WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS DISPLAY TO RAIN OR MOISTURE.

FEATURES

- Color display suitable for character display
- Color picture tube with good focus characteristics
- Composite or chrominance and luminance video signal can be used as input video signal
- With audio amplifier circuit and speaker
- Low power consumption of 65 W

IMPORTANT

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient the receiving antenna
- relocate the computer with respect to the receiver
- move the computer away from the receiver
- plug the computer into a different outlet so that computer and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

POWER SOURCE

This color display is designed to operate on 120 volts 60 Hz, AC house current. Insert the power cord plug into a 120 volts 60 Hz outlet.

NEVER CONNECT THE DISPLAY TO OTHER THAN THE SPECIFIED VOLTAGE, TO 50 Hz OR TO DIRECT CURRENT.

Note: Never remove the back cover of the display as this can expose you to very high voltage and other hazards. If the display does not operate properly, unplug the display and call your dealer or service shop.

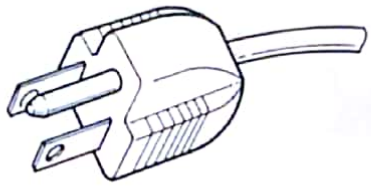
NOTE:

- This color display is equipped with a three-wire grounding-type plug a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.

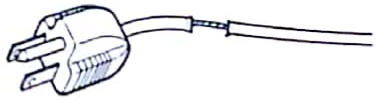
- When the power cord or plug is damaged or frayed, unplug this color display from the wall outlet and refer servicing to qualified service personnel.

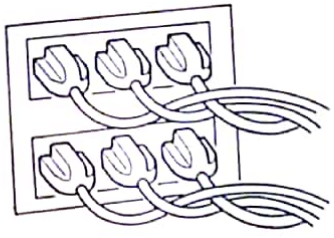
- Do not overload wall outlets and extension cords as this can result in fire or electric shock.

- Grounding-Type Plug



- NO GOOD





TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

CAUTIONS ON USE

★ PRECAUTIONS TO BE OBSERVED FROM THE VIEW POINT OF SAFETY

■ Cautions on electric shock

A section with high voltage is present inside the color display. Do not touch the inside; it is dangerous.

■ Take good care of the power cord

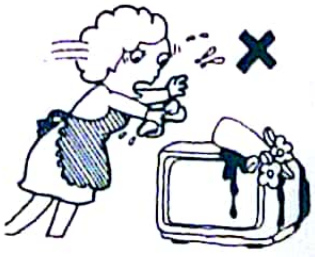
Do not stuff the power cord under the set, or hold any thing with the power cord, to prevent it from being damaged. It is dangerous to use the power cord while it is damaged. Be sure to pull the power cord out by holding the plug without holding the power cord.

■ Cautions on the power voltage

When the power voltage is extremely high or low, it may cause trouble or it may not give optimum performance. Consult your dealer at that time.

■ Keep water out

When water or liquid enters the set, it becomes dangerous to use the unit. Immediately pull the plug out and contact your dealer.

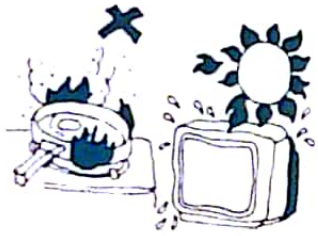


■ Keep in a well-ventilated place

Ventilation holes are provided in the cabinet to prevent the temperature from rising. Do not place the unit in a place badly ventilated or cover the unit with cloth, or place the unit on a carpet; it clogs the ventilation holes.

■ High temperature causes trouble

Avoid placing the unit in direct sunshine, near a heating appliance or where lamp soot will directly contact the unit such as in a kitchen, etc. It can harm the cabinet.

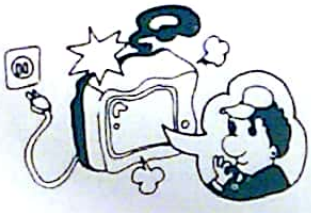


■ Do not apply a shock

The picture tube is made of glass, so do not apply a shock by dropping, crushing, etc.

■ When behavior is abnormal

When any abnormal sound, odor or smoke is generated, turn the power switch off, pull the power plug out from the socket and contact your dealer.



■ It is dangerous to let foreign matters enter the unit

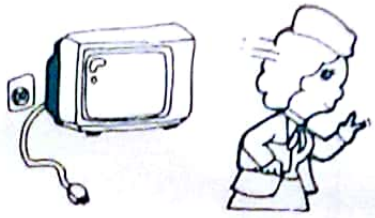
When metals or inflammables are inserted or dropped through the ventilation hole, it can cause trouble such as electric shock or fire, etc.

■ Keep in a place with little moisture or dust

Do not place the unit in a place with much moisture or dust such as inside a bathroom or near a washing machine, etc.
This can cause trouble.

■ When the unit is not used for a long time

Be sure to pull the power plug out from the socket when you are going on a trip, etc. and the unit will not be used for a long time.



★ CAUTIONS

■ Treating the surface

Do not wipe the surface of the set using volatiles such as benzine or thinner, or chemically treated cloth; do not apply insecticide. It may denature the surface or cause peeling-off of the paint. Be careful in that when a vinyl product is kept in contact with the surface for a long time, stains may occur.

■ Be careful of magnetism

Do not bring materials which generate magnetism, such as a magnet, speaker system, printer, floppy disc, etc. nearby; the set may be affected by magnetism, causing color disturbance, picture distortion, etc.

■ Static electricity of the picture tube

You may feel electricity when you touch the surface of the picture tube. This is because it is static-electrified, and is not harmful to human body.

■ Cleaning

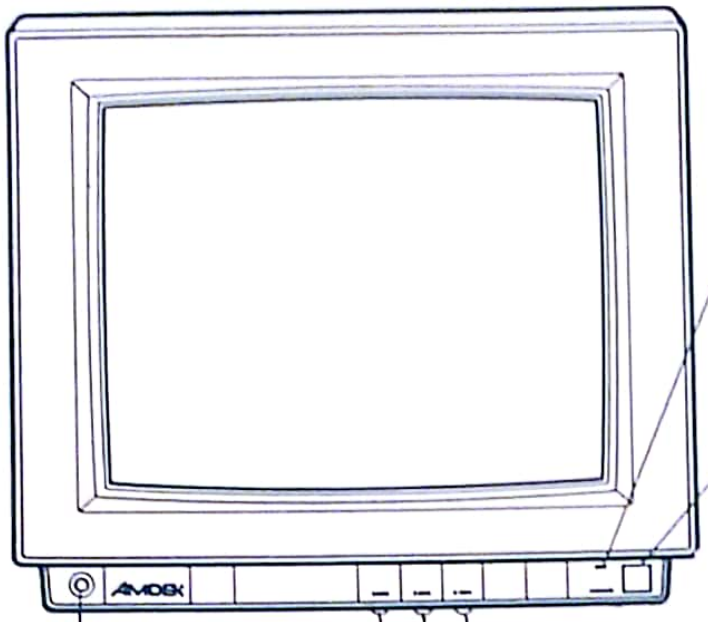
Dust inside the set may cause trouble. Avoid putting the unit in a place with much dust and ask the dealer to clean the inside of the set approximately once a year.

■ When any trouble occurs

When any trouble occurs, immediately contact the dealer from whom you purchased the unit.

LOCATION OF CUSTOMER CONTROLS

FRONT VIEW



POWER INDICATOR
This lights when the power is ON.

POWER SWITCH

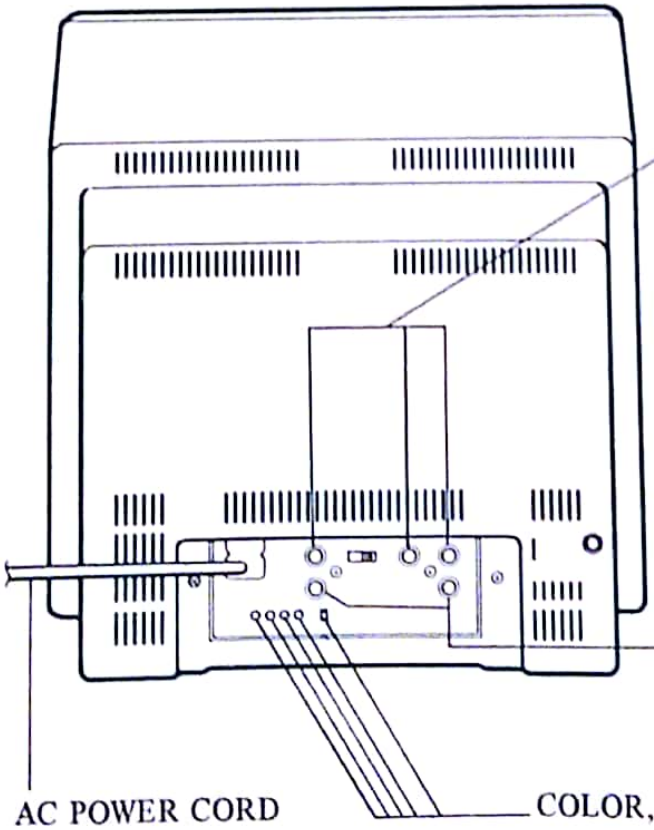
PICTURE CONTROL (CNT)

BRIGHTNESS CONTROL (BRT)

VOLUME CONTROL (VOL)

HEADPHONE JACK
Insert the headphone plug.

REAR VIEW



VIDEO INPUT TERMINAL
(NTSC, CHROMINANCE, LUMINANCE)

AUDIO INPUT TERMINAL
(AUDIO IN)

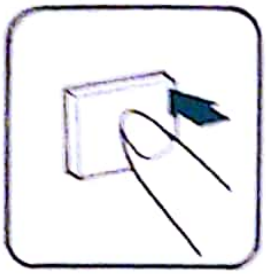
AC POWER CORD

COLOR, TINT, H.PHASE, V.HOLD, V. SIZE

ORDINARY OPERATION

- When viewing the color display in general, a beautiful color picture can be obtained by handling the unit as described in items [1] – [4].

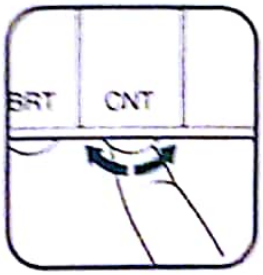
[1] Turn the power ON and adjust



Power is turned on when the knob is pushed.

Push the knob again to turn the power off.

[2] Adjust the picture

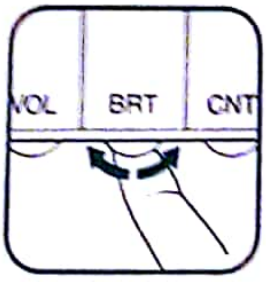


When the surrounding is bright.

When the surrounding is dark.

Adjust the picture according to the brightness of the room. The picture gets brighter, contrast stronger and the color thicker as the picture control (contrast control) knob is turned clockwise.
The picture becomes easy-to-see as this knob is turned counterclockwise in a dark room.

[3] Adjust the brightness

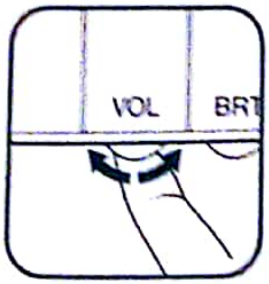


Bright Dark

Adjust the BRIGHTNESS as shown below.

1) Adjust the picture control knob (CONTRAST) according to the brightness in the surroundings to obtain a picture that is easy-to-see.
2) Turn the brightness control knob to adjust so that the picture is clear.

[4] Adjust the Volume



VOLUME INCREASE

VOLUME DECREASE

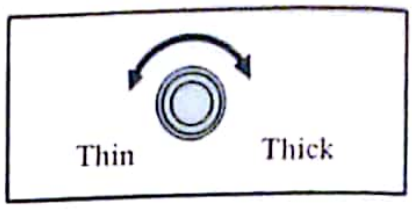
The volume gets larger as the knob is turned clockwise, and smaller as it is turned counterclockwise.

ADJUSTING THE COLOR

When the tint, color and brightness knobs are set to their center points, the standard color picture is obtained.
Adjust as shown below when you desire to vary the color.

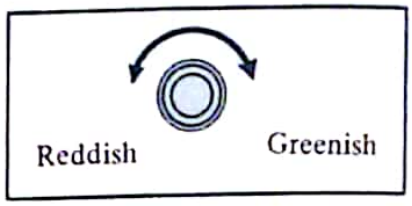
COLOR

Adjust so that the color appears natural. The color increases in thickness as the knob is turned clockwise.



TINT

When the knob turned clockwise, skin color becomes greenish; when it is turned counterclockwise, it becomes reddish. Adjust so that the color becomes natural.



BRIGHTNESS

Adjust the BRIGHTNESS and CONTRAST as shown below.
1) Turn the picture control (CONTRAST) knob fully counterclockwise.
2) Turn the brightness control knob to adjust so that the picture is clear.
3) Adjust the picture control knob (CONTRAST) according to the brightness in the surroundings to obtain a picture that is easy-to-see.

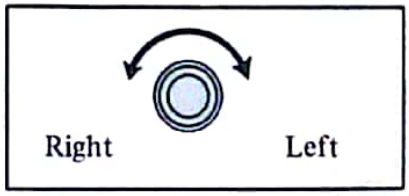
BEFORE CONCLUDING THAT THERE IS

■ **When the picture flows vertically**

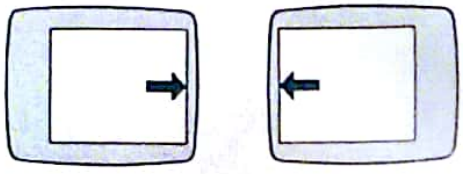
When the picture branches to the top and bottom, or flows vertically, turn the vertical hold control (V-HOLD) gradually to adjust it.

■ **When the picture deviates to the right or the left**

The picture moves slightly to the horizontal direction by turning the horizontal phase control (H.PHASE) knob. On receiving the recommended signal, adjust so that the picture is center.



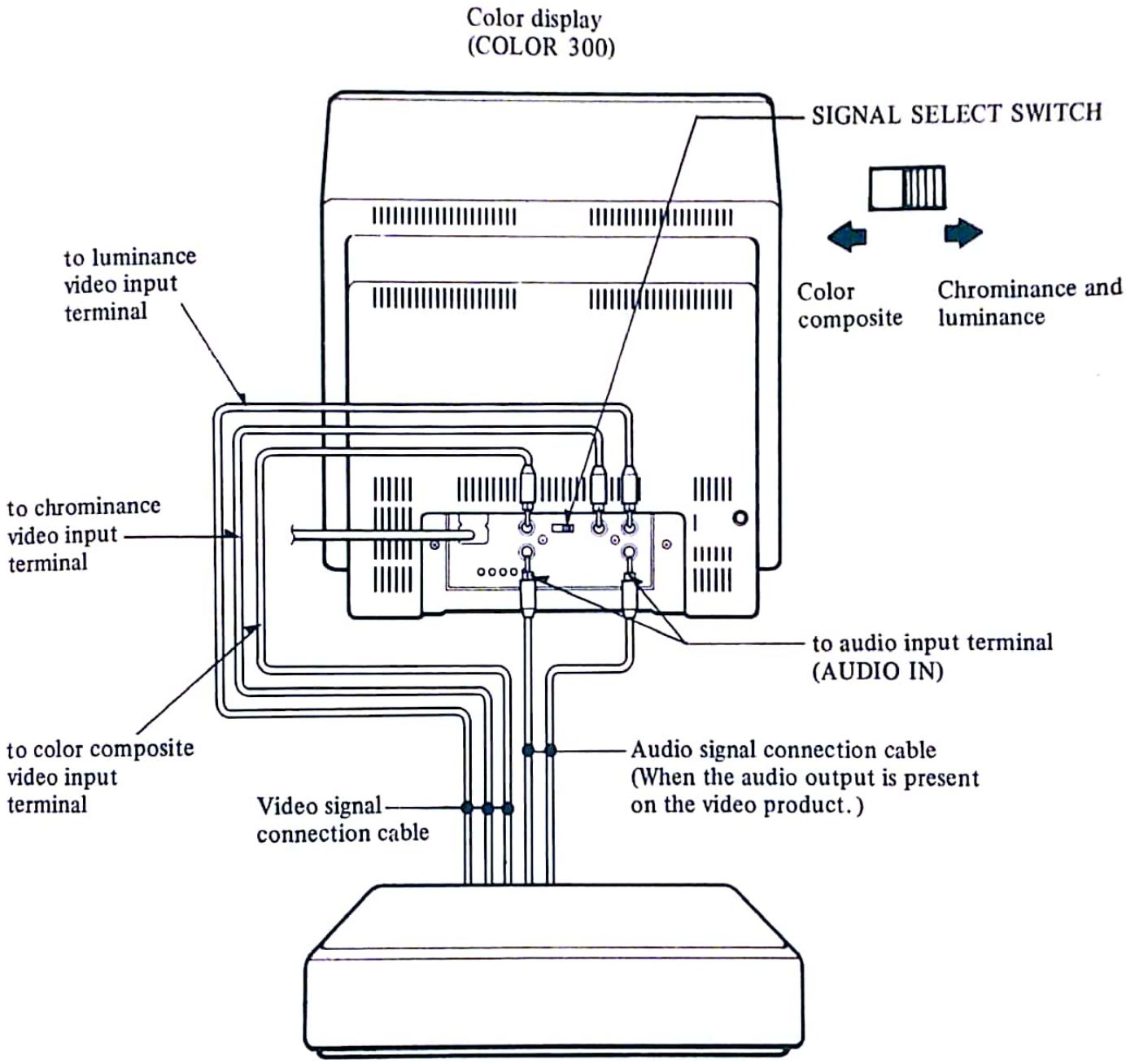
* Refer to "When signals other than the recommended signal are received" on page 11.



CONNECTING WITH EXTERNAL EQUIPMENT

Connect external equipment referring to the example shown below.

Cautions:
Be sure to cut off the power of the equipment connected to the color display before connecting with external equipment.

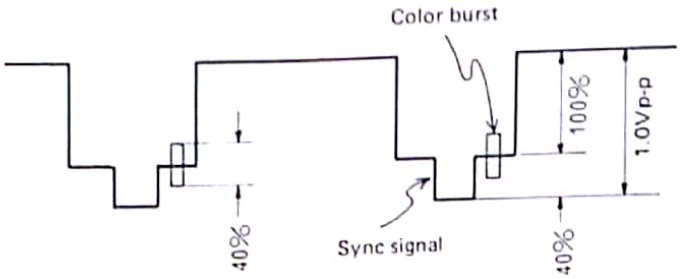

Color display
(COLOR 300)
SIGNAL SELECT SWITCH
Color composite
Chrominance and luminance
to luminance video input terminal
to chrominance video input terminal
to color composite video input terminal
to audio input terminal (AUDIO IN)
Audio signal connection cable (When the audio output is present on the video product.)
Video signal connection cable

Video product provided with color composite or chrominance and luminance video signal output.

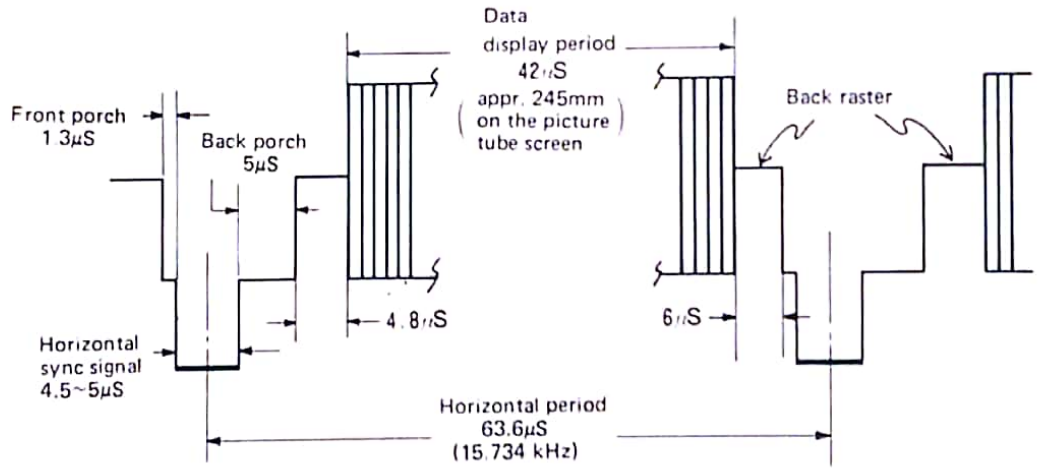
VIDEO INPUT SIGNAL

Recommended signals are shown below.

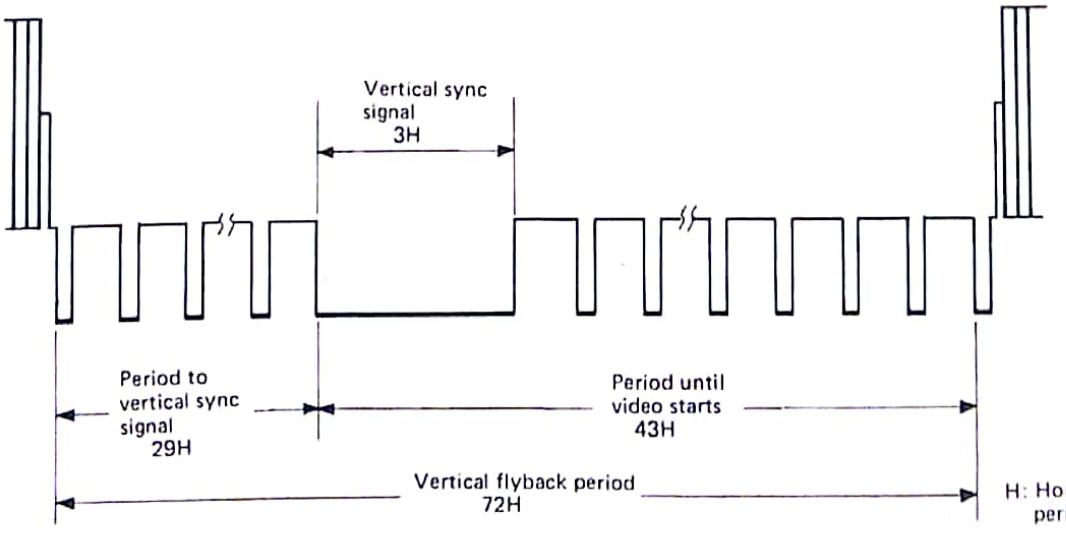
1. Signal level ..... 1.0 Vp–p± 0.1 V (75Ω terminal, from white peak to sync peak)
2. Sync polarity ..... Negative
3. Wave form



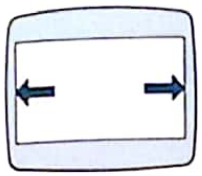
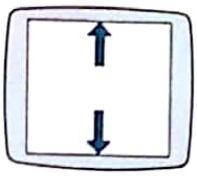
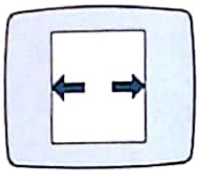
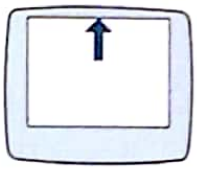
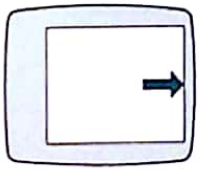
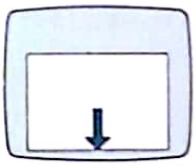
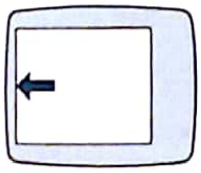
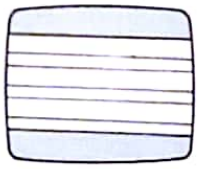
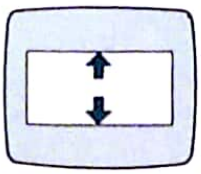
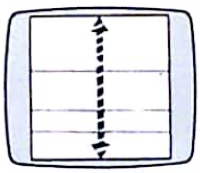
4. Color sub-carrier wave frequency ..... 3.58 MHz or less
5. Horizontal sync period



6. Vertical sync period


Vertical sync signal 3H
Period to vertical sync signal 29H
Period until video starts 43H
Vertical flyback period 72H
H: Horizontal period

When signals other than the recommended signal are received

Phenomenon	Cause	Phenomenon	Cause
Picture width too wide 	Data display period is more than 42μS.	Height of picture too much extended 	Vertical flyback period is 72H or less.
Picture width too narrow 	Data display period is 42μS or less.	Picture deviates upward. 	Period until vertical sync signal is 29H or more.
Picture deviates to the right. 	Value reduction of front porch from back porch is 3.7μS or more.	Picture deviates downward. 	Period until vertical sync signal is 29H or less.
Picture deviates to the left. 	Value reduction of front porch from back porch is 3.7μS or less.	Picture becomes lateral stripes. 	Horizontal sync frequency is not set to 15.73 kHz.
Height of picture too shortened. 	Vertical flyback period is 72H or more.	Picture flows vertically (upward and downward) 	Vertical sync frequency is not set to 60 Hz.

SPECIFICATIONS

Input signal	
Video signal	NTSC standard composite color video signal Video : positive, Sync: negative Input level: 1.0Vp–p/75Ω Luminance video signal: 1.0Vp–p/75Ω Chrominance video signal: 1.0Vp–p/75Ω
Audio signal	0.5Vrms
Power input	AC120V ±10% 60 Hz
Power consumption	65 W (1.0A)
Picture tube	A34JEB60X (13 inch, 90 degrees)
Sound out	1W
Speaker	9 x 6 cm, 8Ω
Input terminal	Video in: RCA phono-jack Audio in: RCA phono-jack
Weights	Appr. 11.6kg
Dimensions	(W) 36.3 x (H) 31.7 x (D) 39.9 cm

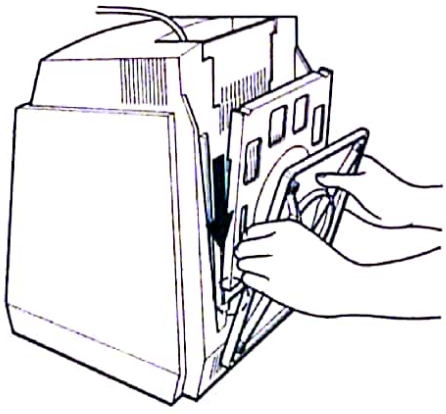
☆ Specifications are subject to change without notice for performance improvement.

HOW TO INSTALL THE OPTIONAL TILT STAND

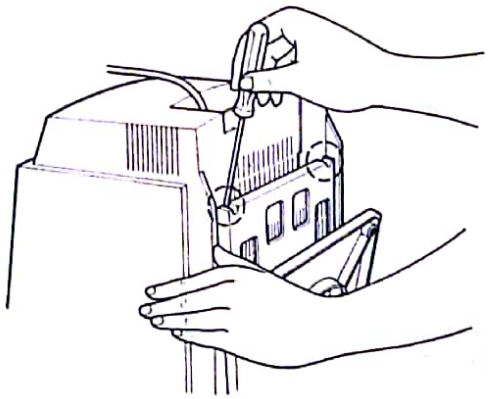
A tilt stand (optional) can be installed with this color display.
You can set color display to the desired angle with this tilt stand.

CAUTION – This color display may be used only with AMDEK exclusive use tilt stand. Use with other tilt stands may result in instability causing possible injury.

(1) Install the tilt stand at the bottom of the color display.



(2) Fix the stand at 2 positions using screws.



AMDEK CORP.

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Printed in Japan YS-R (B)